Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833040 / Theater Air Control Sys Improvements

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 0207412F

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			EV 2019	EV 2019	EV 2019					То	
Resource Summary	Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	22.710	1.163	23.233	4.970	28.203	20.131	2.901	2.951	7.216	-	85.275
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	22.710	1.163	23.233	4.970	28.203	20.131	2.901	2.951	7.216	-	85.275
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	22.710	1.163	23.233	4.970	28.203	20.131	2.901	2.951	7.216	-	85.275
(The following	Resource Sum	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)	•			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

PE 0207412F CONTROL AND REPORTING CENTER (CRC)

The Control and Reporting Center (CRC) is a mobile, ground-based theater air control system (TACS) surveillance and battle management command and control (BMC2) element. It consists of facilities, equipment, and people. It is a customizable, modular, transportable, and persistent weapon system employed at the tactical level to support air and surface operations. The CRC is a family of systems which includes: AN/TYQ-23(V)1 Operations Module (OM) (to be replaced by the AN/TYQ-23v5), a low density/high demand (LD/HD), rapidly deployable, ground-based C2 asset that features an automated, computer-based information system to provide operators with a real-time battle space picture necessary to plan, direct, and control tactical air operations and airspace management tasks; AN/TSC-147 Joint Tactical Information Distribution System (JTIDS) Module (JM) (to be replaced by the Link 16 Upgrade using the Multifunctional Information Distribution System Joint Tactical Radio System (MIDS JTRS)); AN/TRC-213/214 Remote Radio Secure Voice System (RRSVS); and the AN/TPS-75 Radar, CRC's organic radar, (to be replaced by the Three-Dimensional Expeditionary Long Range Radar (3DELRR) (PE 0207455)). Funding may be used to address Diminishing Manufacturing Sources and Material Shortages (DMSMS) issues.

In order to meet warfighter requirements, incremental updates are required. Phase 1 capabilities include, but are not limited to: JM Link 16 Upgrade kits and DMSMS updates (JM Link 16 Upgrade will provide for crypto modernization and will meet FAA mandated frequency re-mapping requirements, as well as stand up organic software and hardware support); Secret Internet Protocol Router Network (SIPRnet) connectivity in order to fulfill mission requirements; and a Cross Domain Solution (CDS) to update cyber security. Fielding and DMSMS updates and interim contract support will continue through FY21.

Funding for this exhibit contained in PE 0207412F.

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	8.899	8.899 1.163		4.970	18.655	8.575	3.801	3.261	7.216
AFNG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	13.811	0.000	9.548	-	9.548	9.856	1.200	1.400	-
Total:	Quantity	-	-	-	-	-	-	-	-	-

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications 833040 / Theater Air Control Sys Improvements

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 0207412F

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

				FY 2018	FY 2018	FY 2018				
Secondary	Distribution	FY 2016	FY 2017	Base	осо	Total	FY 2019	FY 2020	FY 2021	FY 2022
Secondary Distribution	Total Obligation Authority	22.710	1.163	23.233	4.970	28.203	18.431	5.001	4.661	7.216

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833040 / Theater Air Control Sys Improvements

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 0207412F

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule		,		Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)				
P-40a	TACSI Mods				- /0.000	- / 22.710	- / 1.163	- /4.450	- / 0.000	- / 4.450
P-3a	1 / CRC Phase 1 (Other)				- / -	- / 0.000	- /0.000	- / 18.783	- /4.970	- / 23.753
P-40	Total Gross/Weapon System Cost				- 1 -	- / 22.710	- / 1.163	- / 23.233	- / 4.970	- / 28.203
	Exhibits Schedule				FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Exhibit Type	Exhibits Schedule Title*	Subexhibits	ID CD	MDAP/ MAIS Code	FY 2019 Quantity / Total Cost (Each) I (\$ M)	FY 2020 Quantity / Total Cost (Each) I (\$ M)	FY 2021 Quantity / Total Cost (Each) I (\$ M)	FY 2022 Quantity / Total Cost (Each) I (\$ M)	To Complete Quantity / Total Cost (Each) I (\$ M)	Total Quantity / Total Cost (Each) I (\$ M)
		Subexhibits	ID	MAIS	Quantity / Total Cost	Quantity / Total Cost				
Туре	Title*	Subexhibits	ID	MAIS	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)				

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY18 funding supports:

- a. Operations Module (OM) MOD & PHASE 1 capabilities include, but are not limited to, the following: OM Mod installations, Interim Contractor Support (ICS), Diminishing Manufacturing Sources and Material Shortages (DMSMS) support, Cross Domain Solution (CDS), Joint Tactical Information Distribution System Module (JM) Link 16 Upgrade Production Kits, and Secret Internet Protocol Router Network (SIPRnet).
- b. SUPPORT: (OM Mod & Phase1) Includes efforts, but are limited to, Software Integrated Laboratory (SIL) activation, and Program Management Administration (PMA) activities in support of the Control and Reporting Center (CRC).

Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 3

P-1 Line Item Number / Title:

833040 / Theater Air Control Sys Improvements

TACSI Mods

3060 1 03 1 3						['	6550407 Theater Air Control Sys Improvements								ACSI Muus				
		P	rior Year	s		FY 2016	;		FY 2017		FY	′ 2018 Bas	se	F	2018 OC	:0	FY	/ 2018 Tot	tal
Item Number / Title	ID CD	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
TYQ23A / AN/TYQ23A OM MOD		-	-	-	-	-	22.710	-	-	1.163	-	-	4.450	-	-	-	-	-	4.450
Secondary Distribution																			
AF			-	-		-	8.899		-	1.163		-	4.450		-	-		-	4.450
AFNG			-	-		-	13.811		-	0.000		-	0.000		-	-		-	0.000
Total		-	-	0.000	-	-	22.710	-	-	1.163	-	-	4.450	-	-	0.000	-	-	4.450

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Modification Information:

Item Number / Title	Models of Systems Affected	Modification Type
TYQ23A / AN/TYQ23A OM MOD	OMMOD	Other

Exhibit P-3a, Individual Modification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 3

P-1 Line Item Number / Title:

833040 / Theater Air Control Sys Improvements

1 / CRC Phase 1

ID Code (A=Service Ready, B=Not Service Ready)	:					MDAP/MAIS Code:										
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total				
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-				
Gross/Weapon System Cost (\$ in Millions)	-	0.000	0.000	18.783	4.970	23.753	-	-	-	-	-	-				
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-				
Net Procurement (P-1) (\$ in Millions)	-	0.000	0.000	18.783	4.970	23.753	-	-	-	-	-	-				
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-				
Total Obligation Authority (\$ in Millions)	-	0.000	0.000	18.783	4.970	23.753	-	-	-	-	-	-				
(The following	(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)															
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-				
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-				

Description:

PE 0207412F CONTROL AND REPORTING CENTER (CRC) CRC Phase 1

In order to meet warfighter requirements, incremental updates are required. Phase 1 capabilities include, but are not limited to: JM Link 16 Upgrade kits and DMSMS updates (JM Link 16 Upgrade will provide for crypto modernization and will meet FAA mandated frequency re-mapping requirements, as well as stand up organic software and hardware support); Secret Internet Protocol Router Network (SIPRnet) connectivity in order to fulfill mission requirements; and a Cross Domain Solution (CDS) to update cyber security. Fielding and DMSMS updates and interim contract support will continue through FY22.

Milestone/Development Status

N/A

. 47. 1										
Second	dary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	9.235	4.970	14.205	-	-	-	-
AFNG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	9.548	-	9.548	-	-	-	-
Total:	Quantity	-	-	-	-	-	=	-	-	=
Secondary Distribution	Total Obligation Authority	0.000	0.000	18.783	4.970	23.753	-	-	-	-

Exhibit P-3a, Individual Modification: FY 2018 Air ForceDate: May 2017Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:
833040 / Theater Air Control Sys ImprovementsModification Number / Title:
1 / CRC Phase 1

3080F / 03 / 3			833040 /	Theater Air	Control Sy		1 / CRC Phase 1					
ID Code (A=Service Ready, B=Not Service Ready):					MD	AP/MAIS Co	ode:					
Models of Systems Affected: CRCPh	ase1	Modif	ication Typ	pe: Other	•		Re	lated RDT	&E PEs:			
	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ A										
Procurement									·	·		
Modification Item 1 of 1: CRC Phase 1												
B Kits												
Recurring		_										
CRC Phase 1:EQUIPMENT Group B (Active)	- 1 -	- 1 -	- 1 -	9 / 7.336	- / -	9 / 7.336	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
CRC Phase 1:EQUIPMENT Group B (Guard)	- 1 -	- 1 -	- 1 -	12 / 9.548	- 1 -	12 / 9.548	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Subtotal: Recurring	- / -	- / -	- / -	- /16.884	- / -	- /16.884	- / -	- / -	- / -	- / -	- / -	- / -
Subtotal: CRC Phase 1	- / -	- / -	- / -	- /16.884	- / -	- /16.884	- / -	- / -	- / -	- / -	- / -	- / -
Subtotal: Procurement, All Modification Items	- / -	- / -	- / -	- /16.884	- / -	- /16.884	- / -	- / -	- / -	- / -	- / -	- / -
Support (All Modification Items)	<u> </u>	<u> </u>	<u> </u>	<u> </u>		<u> </u>		<u> </u>	<u> </u>	<u> </u>		
Type 1 Training	- 1 -	- 1 -	- 1 -	- /1.899	- 1 -	- / 1.899	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
OCO INSTALLATIONS	- 1 -	- 1 -	- 1 -	- / -	- /4.970	- /4.970	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Subtotal: Support	- / -	- / -	- / -	- /1.899	- /4.970	- /6.869	- / -	- / -	- / -	- / -	- / -	- / -
Installation												
Subtotal: Installation	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total												
Total Cost (Procurement + Support + Installation)	-	0.000	0.000	18.783	4.970	23.753	-	_	_	_	-	-

Date: May 2017 Exhibit P-3a, Individual Modification: FY 2018 Air Force Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modification Number / Title: 3080F / 03 / 3 833040 / Theater Air Control Sys Improvements 1 / CRC Phase 1 MDAP/MAIS Code: ID Code (A=Service Ready, B=Not Service Ready): Modification Item 1 of 1: CRC Phase 1 Manufacturer Information Manufacturer Name: Solypsis Manufacturer Location: Baltimore, MD Administrative Leadtime (in Months): 3 Production Leadtime (in Months): 21 **Dates** FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 **Contract Dates** Jan 2018 **Delivery Dates** Oct 2019

Installation Information

Method of Implementation: Contract Field Team

Instal	stallation Schedule																														
			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020		FY 2021				FY 2022					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	тс	Tot																
In	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	8	5	-	5	6	6	-	-	-	-	-	0	38
Out	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	8	5	-	5	6	6	-	-	-	-	-	0	38